

Serial No. 10/821,458
Amendment and Response to Office Action
Mailed: 5/22/2006

REMARKS

Reconsideration of the application is respectfully requested. The Examiner has restricted examination of claims 1-23 in this application. Specifically, the Examiner restricted claims 1-7 to Group I as being drawn to structure of a printed circuit board, claims 8-15 to Group II as being drawn to method for stacking a multilayer circuit board, and claims 16-23 to Group III as being structure of an electronic system. .

Applicant respectfully disagrees with this restriction requirement and traverses as follows. Regarding groups I and II, the method of group II as represented by Claim 8 recites: "isolating all power planes in the printed circuit board from all signal layers in the printed circuit board by positioning a ground plane between each group of one or more of the power planes and each group of one or more of the signal layers." Similarly, Claim 1 recites: "...wherein any other signal layers in the printed circuit board are isolated from the first power plane by at least one ground reference plane. Applicant fails to see how the isolation recited in Claim 1 could be obtained by a method of isolating other than that recited in Claim 8. Therefore Group I and Group II recite the same invention.

Similarly, Claim 16 representative of Group III recites: "...wherein at least one of the plurality of ground planes is positioned between each group of one or more of the plurality of power planes and each group of one or more of the signal layers to isolate each of the groups of

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one or more of the power planes from each of the groups of one or more of the signal layers. Applicant fails to see how the isolation recited in Claim 16 could be obtained by a method of isolating other than that recited in Claim 8. Therefore Group II and Group III recite the same invention.

Likewise, as for groups I and III, each requires isolation of signal layers and power layers in a similar structure. Thus, groups I and III also recite the same invention. The capacitance mentioned by the Examiner with respect to group I is only found in dependent Claim 6 and therefore does not cause the invention of Claim 1 to be different from the invention of independent Claim 16.

The Examiner further requires election of a species as illustrated by figures 1, 5, 6, 7, 8, and 9. As discussed at paragraph 31, Figures 6 and 7 discuss various embodiments of the power planes and ground planes, neither of which affect the manner of isolation as recited in Claims 1, 8 and 16. Figure 9 illustrates embodiments of power planes that do not affect the manner of signal plane isolation. Thus, all three groups read on each of Fig 6, 7 and 9. Figure 1 illustrates an embodiment with signal layers grouped towards the center of the stack-up, while Figure 8 illustrates an alternative embodiment with the power layers grouped towards the center of the stack-up. The isolation method and structure recited by Claims 1, 8 and 16 read on both figures. Similarly, Figure 5 illustrates the isolation method and structure in more detail as recited by all three claim groups. Therefore, Applicant respectfully asserts at least each of Claims 1, 8, and 16 are generic to the Figures.

In the event the Examiner maintains this three-way restriction, Applicant provisionally elects Group II and Group III as being method and structure of the same invention. If Examiner still disagrees, Applicant provisionally elects Group III, Claims 16 to 23 for further prosecution and thereby provisionally withdraws the non-elected groups.

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In the event the Examiner maintains the species restriction, Applicant provisionally elects specie 1, Figure 1.

Conclusion

If the Examiner believes it will help to resolve any other issues by way of a telephone conference, the Examiner is kindly invited to contact the undersigned at the telephone number indicated below.

Respectfully submitted,

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